## **ABSTRACT**

A washing machine is provided. The washing machine includes an outer tub configured to store washing water, an inner tub rotatably mounted in the outer tub, a pulsator configured to form a water circulation for washing laundry, and a motor installed under the outer tub and configured to rotate the inner tub and the pulsator. The motor is configured to vary a rotation speed of the inner tub and the pulsator, such that the laundry is washed by a combination of modes. The modes including a centrifugal force washing mode, wherein the motor rotates the inner tub and the pulsator in the same direction for a first predetermined period of time, thereby creating a centrifugal force that is varied according to a variation of the rotation speed, which pushes the laundry against a wall of the inner tub, and an agitation washing mode, wherein the motor rotates the inner tub and the pulsator in the same direction at an identical speed, and then rotates the inner tub and pulsator in a first direction for a second predetermined period of time and then in a second, reverse direction for the second predetermined period of time.